

Sustainable Solutions to Protect Our Environment

Carpet Stewardship in the United States Collaboration for Advancing Legislation and Programs MEETING SUMMARY

May 14 & 15, 2014—Hartford, CT

Attendees

More than 100 local, state, and federal government officials, recyclers, retailers, and other key stakeholders attended the meeting, with about half attending in person and the other half participating via live web streaming (see attendee list). Government officials participating represented 15 states.

Meeting Materials

All meeting materials are <u>available on PSI's website</u>. We encourage you to consult the PowerPoint presentations when reviewing this summary.

Welcoming Remarks

Connecticut Department of Energy and Environmental Protection (CT DEEP) Commissioner Robert Klee welcomed attendees to the meeting and thanked them for participating in an open and frank dialogue. Commissioner Klee then presented Rep. Patricia Widlitz with an honorary "Green Circle" award for her success in sponsoring and passing extended producer responsibility (EPR) legislation for electronics, paint, and mattresses in Connecticut. Rep. Widlitz, who is retiring this year, expressed her appreciation for the award and emphasized that collaboration with all stakeholders is important to developing good legislation. CT DEEP Deputy Commissioner Macky McCleary, who has been instrumental to the agency's success in promoting EPR legislation within a wider waste reduction and materials management strategy, spoke about government's role in setting parameters for market-based solutions to reach desired outcomes, about which he said, "It's not rocket science, but it is the future."

Meeting Overview

Scott Cassel of the Product Stewardship Institute (PSI) thanked meeting sponsors, explained <u>definitions for product stewardship and EPR</u>, and provided an overview of the growth of EPR laws in the U.S. He also discussed the timeline for carpet recycling over the past 15 years, including PSI's carpet stewardship efforts. Scott outlined several key sections of the *Carpet Stewardship Briefing Document*, including reasons why carpet is a product stewardship priority, project goals, and expected meeting outcomes. Scott also discussed why the Carpet and Rug Institute (CRI) and its member companies chose not to participate in the meeting, highlighting the <u>letter that CRI had sent</u> on the eve of the meeting to Commissioner Klee. Scott then outlined PSI's role in facilitating the meeting, how PSI has developed collaborative stakeholder agreements with other industry sectors, and how different industries respond in different ways to governments' offers to engage in collaborative problem-solving. He emphasized that the first day would involve a comprehensive discussion of potential solutions, including voluntary options, EPR legislation, and non-EPR policies (e.g., procurement, recycled content standards, disposal bans, etc.), while the second day would focus on EPR. The meeting was divided into three parts: (1) discussion of all issues and potential

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solutions (this took place during the "Stakeholder Perspectives" session); (2) detailed discussion of four priority issues/solutions; and (3) discussion of elements of a model EPR bill. (See PSI slides 1-19.)

Background/Stakeholder Perspectives

Garth Hickle of the Minnesota Pollution Control Agency (MN PCA) provided a brief history of the national carpet stewardship dialogue dating back to 2000, including the 2002 Memorandum of Understanding (MOU) and the discontinuation of the process in 2011 to develop a new MOU. He also described challenges that he had identified while serving on the CARE board, such as insufficient funding, ineffective collaboration, and an inability to connect CARE's activities to state and regional recycling outcomes. Garth then described the 2013 MPCA-sponsored legislative initiative (HF 865 Section 1). The legislature in Minnesota may consider a bill similar to HF 865 in 2015. (See slides on meeting webpage.)

Terri Goldberg of the Northeast Waste Management Officials Association (NEWMOA) provided a Northeast government perspective. She discussed why carpet is a problem in the region, providing local data on carpet generation, disposal, recycling, and management costs. Terri described NEWMOA's role in harmonizing regional materials management priorities and policies, including its involvement with the Northeast Committee on the Environment, which comprises seven Northeast state environmental commissioners who designated carpet as a priority for increasing recycling and EPR programs. NEWMOA estimates that eight states in the region collectively spend about \$23 million each year on carpet waste management. (See slides on meeting webpage.)

Bob Peoples of Carpet America Recovery Effort (CARE) provided 2013 preliminary data on scrap carpet collection, disposition, and markets. He emphasized that the carpet industry experienced nearly a 50 percent reduction in sales during the recent recession, and is slowly recovering. Since 2002, CARE has diverted over 3.1 billion pounds of carpet from disposal, including 438 million pounds in 2013, which is up 25 percent from the previous year. Bob highlighted the challenges that CARE faces, noting that the growth of polyethylene terephthalate (PET) in the recycling stream is the most pressing challenge of all. He also noted that collection from rural counties costs much more than collection from urban areas, and might not make economic sense in all cases. Finally, he explained that negotiations are underway between carpet mills and recyclers regarding a voluntary initiative; however, because the negotiations are ongoing, he was unable to disclose further details. Bob emphasized that since CARE was established, closed-loop recycling of carpet (i.e., recycling used carpet into new carpet) has increased from zero to over 30% of all carpet recycled, with recycled material going into new face fiber and backing. He explained that this is a major technical accomplishment given that a carpet fiber is approximately 1/10 the diameter of a human hair. Finally, he explained that it takes more than 12 months to take a new technology from the research and development phase to implementation once a decision is made to roll it out, including equipment fabrication, delivery, installation, and commissioning. CARE opposes further legislation, and supports voluntary, "market-based" solutions. (See slides on meeting webpage.)

Walter Willis of the Solid Waste Association of Lake County, Illinois (SWALCO) gave a brief overview of the Illinois Carpet Recycling Working Group (IL CRWG), which developed a market development report and carpet recycling toolkit before ultimately deciding that legislation was necessary to advance carpet recycling. Walter provided an overview of SB3546, the bill that Illinois introduced based on the legislative model that PSI and its government members developed in fall 2013. (See "Elements of an EPR bill for Carpet" on p.6.) Walter also outlined potential solutions to the four key issues laid out in the *Carpet Stewardship Briefing Document*, including carpet industry financing for recycling and market development, although government procurement is also critical. Additionally, he promoted the education of collection

site workers, carpet installers, and consumers to reduce carpet contamination, and supported testing for asbestos. (See slides on meeting webpage.)

Kathy Frevert of CalRecycle gave an overview of AB2398, the nation's first carpet EPR law, stating that as other products or materials are addressed, carpet may become an even higher state priority. After initial increases in carpet collection and recycled output in the first year, the amount of carpet collected has remained constant or decreased over the past six quarters, while the amount of recycled output has remained constant or decreased over the past seven quarters. Kathy attributed this stagnation to increased scrap carpet processing costs and lower prices for processed materials. In just a few short years, the economics of recycling have changed. Kathy emphasized that CARE has flexibility in its stewardship plan, noting that last year it increased the financial incentive for scrap carpet that gets processed into high value materials, and added a new incentive for products made with non-nylon materials. California stakeholders have offered the following ideas to improve the program: collection incentives; educating retailers/dealers who are a potential source of clean carpet; sorting prior to transport to avoid shipping carpets that are not recyclable; providing greater financial support for recycling; and expanding collection support. While the incentives introduced last year to create markets for non-nylon materials may work in the long run, there is a lag time for new markets to develop. Kathy emphasized that more stakeholders are needed to update the NSF-140 standard for carpet that is used by procurement officials. (See slides on meeting webpage.)

Sean Ragiel of CarpetCycle, a New Jersey-based carpet recycling company that reclaimed over 18 million pounds of post-consumer carpet in 2013, gave an overview of the company's business, including the types of carpet processed, current trends in carpet recycling, and disposition of collected materials. Sean described the economic challenge that his business faces as the amount of PET carpet entering the collection stream continues to grow. He also described markets for recycled carpet fibers, including a "geo-hay"—a new type of erosion and sediment control product. Sean emphasized the high cost of technology needed to analyze and identify carpet face fibers prior to recycling: his company paid \$75,000 for such a unit in 2006, and now pays about \$20,000 for newer portable units. Scanning equipment repairs are also a significant cost, at \$1,500 per repair. (See slides on meeting webpage.)

Michael Chenard of home improvement retailer Lowe's provided his company's perspective. Lowe's supports voluntary, market-based solutions, and is opposed to legislative mandates that include a fee charged at retail. Lowe's may be neutral toward cost internalization laws. While opposed to legislative mandates, Michael stressed the importance of retail engagement in the event that EPR legislation gets enacted. Additionally, since not all carpet retailers conduct business the same way, he noted that participation and compliance with programs that are based on a fee collected at retail can be challenging. For example, Lowe's charges for carpet by the linear foot, so assessments based on a square yard measurement would have to first be converted. Lowe's also works with 1,800 independent contractors to install their carpet, which adds a layer of difficulty when ensuring compliance with installation program activities. Additionally, Michael described logistical challenges for installers when recycling or disposing of carpet. Regarding retailers' role in outreach, he said that education in a retail environment works only when the consumer wants to be educated. Michael added that Lowe's has reduced its own waste costs by 85 percent in the past five years by focusing on diversion of recyclables from the waste stream. As a final note, roughly 80 percent of Lowe's carpet sales use PET face fibers.

Stakeholder Comments

One state government official stated that the original offer from mills to recyclers as part of
negotiations for a voluntary solution was \$0.01 per square yard, and that if a negotiated agreement is
reached, recyclers would be expected to oppose EPR legislation.

- Carpet Recycling Services is building a 100 ton-per-day, zero-landfill scrap carpet processing facility in Attleboro, Massachusetts, which is 30 minutes from the Connecticut border. A company representative strongly supported EPR legislation to provide supply for the facility.
- Multiple government attendees said that EPR policy ensures a level playing field and provides clear goals for market-based solutions, increasing effectiveness of these programs.
- CARE estimates carpet discards to be about 12 pounds per person, per year.
- CT DEEP staff will investigate the average profitability of carpet manufacturers, which is available for publicly-traded companies.

Key Issues and Potential Solutions (see PSI slides 24-32)

Key Issue #1: Carpet design changes, as well as the growing prevalence of PET in the waste carpet stream, have increased the cost of recycling. Several factors are driving down the cost of PET carpet, including new production technologies, oversupply and resultant low cost of virgin PET resin, high use rate of recycled PET content, and enhanced dyeing technologies. Meanwhile, the price of nylon has remained high. Additionally, recycled PET from carpet has to compete on the market with both virgin PET and PET derived from beverage containers, both of which are cleaner and less expensive to produce, making PET from carpet an unattractive option. The best technology for reclaiming PET from carpet is depolymerization, which yields a high-quality product, but is still in development and may never be available at a price that is economically viable without additional support. If the cost of PET carpet recycling is not brought down or offset by sufficient markets or incentives, recyclers may decline to accept PET because it adds to disposal costs. The National Association for PET Container Resources (NAPCOR) would prefer that PET from carpet—as well as PET used in blankets, jackets, and other products—be reclaimed for recycling rather than landfilled or burned for energy.

Potential solutions:

- Incentive payments as part of EPR: Extra payment from manufacturers to processors that recycle
 lower-value polyester carpet to offset higher costs and spur investment in recycling infrastructure.
 The recent Illinois carpet bill specifies incentives for processors of PET, PTT, and blended carpet. On
 balance, attendees from government agencies showed interest in moving forward with this option.
- 2. **Voluntary incentive payments:** Similar to incentives under EPR, but negotiated between manufacturers and recyclers without the need for agency approval. CARE recommended allowing this negotiation process play out rather than exploring EPR options.
- Research and development: Establish new end markets for PET carpet and better recycling technologies that are affordable for recyclers.
- 4. **Fee on PET carpet production:** State governments charge carpet manufacturers a fee on the production of carpet from PET.
- 5. **Manufacturer take-back:** One recycler suggested that manufacturers take back used PET carpet and manage it themselves.

Key Issue #2: Lack of markets for carpet-derived commodities and the products made from them lowers the value of recycled carpet. For any increase in carpet recycling to be sustainable, and for scrap carpet to hold its intrinsic value as a resource, more end markets are needed for products made from recycled carpet. Markets are specifically lacking for PET, PTT, and blended carpet, and also for the "carcass," which makes up about 50 percent of carpet by weight.

Potential solutions:

Government and institutional procurement policy: Governments and large institutions use
procurement specifications, policies, and grants to promote a niche market for hard-to-recycle
products until a broader market can develop. Procurement policy is easier to enact than EPR laws,

but there are limits to what it can accomplish (e.g., Minnesota helped update the NFS-140 standard, but it has not led to an increase in carpet recovery), and many agencies have already implemented sustainable carpet procurement policies. Furthermore, governments typically do not evaluate or promise to buy products until they are market-ready, as too many new products do not perform as promised. Meeting attendees expressed an interest in new solutions to either create long-term markets or hold manufacturers accountable for their products when markets are inadequate.

- 2. Research and development: Attendees cited multiple products that could already be manufactured from PET carpet, including marine timbers, railroad ties, sound barriers, decking, and carpet padding, but only one of these products is currently sold. These products are being developed but need more market pull to increase the demand for recycled PET carpet (e.g., Fiberon Decking could produce pilings from PET immediately if the company had a guaranteed market). PET carpet may also potentially be recycled into feedstock for three-dimensional printers. CARE expects an announcement shortly on a new fiber technology designed to allow for carpet-to-carpet recyclability, which would be a major step in closing the loop.
- 3. **Manufacturer showrooms:** Carpet manufacturers can use their own headquarters as exhibit spaces for newly developed materials made from recycled carpet. CARE explained that some already do so.

Key Issue #3: Much scrap carpet enters the solid waste stream and, due to contamination, can no longer be recycled. To be recycled, carpet must be clean and dry. However, used carpet is almost always mixed with other materials, including ceiling tiles and gypsum wallboard from commercial job sites and demolitions. On residential sites, waste carpet gets wet, which interferes with the fiber harvesting process, and can become soiled and bug-infested. While wet carpet can be sun-dried or shredded, once it is shredded, it is no longer useable in carpet-to-carpet recycling. Asbestos from other products on a job site (e.g., asbestos tiles) can also contaminate carpet. Bedbugs were also brought up as a potential issue. CT DEEP has developed an outreach and education strategy regarding bedbugs as part of its mattress program.

Potential solutions:

- 1. **Installer programs:** Under an EPR law, make installers responsible for collecting and transporting used carpet to a recycling facility. Incentives and specific responsibilities should take into consideration the opportunity costs and convenience for the installer.
- 2. **Deconstruction**: On commercial job sites, workers should preserve carpet recyclability by source-separating and storing carpet in closed containers.
- 3. **Reverse distribution:** Use retail distribution networks, including trucks and distribution centers, to transport used carpet for recycling more efficiently and more conveniently for installers.
- 4. **Curbside disposal bans:** State and local governments with curbside garbage collection can ban the disposal of scrap carpet at the curb.
- 5. **Asbestos scanners**: Promote the use of scanner guns designed to detect asbestos by carpet collectors and recyclers. These devices are made by the same company that creates carpet polymer scanning technology. Identify whether the same devices can be used for both purposes.

Key Issue #4: Barriers to entry into the carpet recycling business. According to one recycler at the meeting, carpet recyclers must collect at least 6 million pounds of product, 80 percent of which is clean and marketable, to turn a profit. The highest costs are transport logistics and machinery, including both capital and repairs.

Potential solutions:

Printing information about the polymer content of carpet on the back of the product at the time of production (i.e., "back-stamping") would reduce recyclers' costs in the future by eliminating the need for

expensive scanning equipment. Implementing this change is feasible, although logistical considerations have prevented its implementation. Over time, the cost of carpet scanners ("guns") has dropped by about \$55,000, and advancements in technology and software may bring the cost of these guns down further in future years, which—along with the cost burden—should be weighed against the cost of implementing back-stamping. There is interest among government stakeholders to include mandates for back-stamping in future EPR legislation. As carpet currently installed may be in place for 25 years or more, scanners will continue to be needed even if back-stamping is implemented. Other successful labeling initiatives have risen out of collaboration between state governments, including Mercury-Added Products and Toxics in Packaging.

Other issue identified: Challenges to cost-effective collection in rural areas. The highest cost faced by carpet recyclers is transport logistics, and collection from rural areas is much more expensive than collection from urban areas. Installers in rural areas must drive long distances to bring used carpet to recycling facilities, leading to high transportation costs and potential missed installation jobs due to extended periods in transit. Furthermore, operating hours of the nearest drop-off site may conflict with the installer's availability to deliver used carpet. In California, expanding the rural collection program, which has CARE paying for trailers and transportation, to urban areas was cited as a potential way to increase overall collections and recycled output. Urban areas would like the same benefits that are going to rural areas. CARE spends approximately \$30,000-\$40,000 on rural collection in California, out of approximately \$5 million per year in AB 2398 program revenues, so although the cost per pound of carpet is more than urban areas, it is still a small portion of the budget.

Potential solutions:

- 1. **Covered collection containers**: CARE can provide covered containers in which residents can deposit their clean, dry carpet for recycling, as it does for pilot communities in California. Clear signage and brochures are required regarding what is allowed in the container, and can be developed in partnership with the local jurisdiction.
- 2. **Additional incentives**: EPR or voluntary market-based programs can include bonus incentives for material collected from rural areas.

Elements of an EPR bill for Carpet

This portion of the meeting involved the discussion of a draft "menu of legislative options" that a group of state and local government leaders from about 15 states had developed prior to the meeting. The goal of the session was to develop a set of model bill elements for statewide carpet EPR that is both streamlined and flexible enough to meet the unique and changing regulatory, political, and economic needs of multiple states. These model elements will help harmonize carpet EPR legislation in the U.S., preventing a confusing patchwork of different programs across multiple states. While an increasing number of government agencies, recyclers, environmental advocates, and other stakeholders support an EPR approach, not all states are pursuing EPR legislation, and most carpet manufacturers and retailers are opposed to it, instead supporting voluntary market-based solutions. However, it is important to note that "market-based solutions" can also include regulation that develops a level playing field and enables markets to function optimally. One of the known problems with voluntary market-based systems is that some companies become free riders to try to undercut the competition.

The notes below summarize the presentation slides displayed at the May 15 meeting. They include a statement describing each of the 16 model bill elements, followed by how each element is treated in California AB2398, Minnesota's bill, and Illinois' bill. Based on discussions at the meeting, PSI then summarized the advice given to states that are considering EPR legislation, and recapitulated the comments from meeting participants regarding the first 10 high priority elements. (We have included the remaining six

elements here, as well, for future discussion.) For more detail about how these elements are treated in California's law and in Illinois's and Minnesota's respective bills, refer to PSI's *Elements of Carpet Legislation* table, as well as the actual text of the law and bills—all of which are available on the <u>PSI meeting page online</u>.

- **1. Scope of Products:** The types of materials affected under the bill (e.g., residential and commercial broadloom; carpet tiles; backing, padding, and other underlayment; artificial turf).
 - California (AB2398): Includes broadloom and tiles.
 - Minnesota (HF 865, Sec 1): Includes broadloom, tiles, pad, and underlayment.
 - Illinois (SB3546): Includes broadloom, tiles, pad, underlayment, and turf.

Model: Articulate a "minimum" scope of products that must be included and provide room for producers' plan(s) to add other products (e.g., rugs, mats, cushions, etc.). At a minimum, include commercial and residential broadloom carpet and modular carpet tiles, including natural fibers.

- Turf is made of different polymers than carpet (e.g., recycled tires) and may contain contaminants.
- Natural fibers represent no more than one percent of the market. Identify whether these could be rendered biodegradable. We need a definition for "natural."
- Rugs are smaller than carpet and are constructed differently, often with polymer blends. To differentiate between carpet and rugs for the consumer, use the carpet MOU definitions:
 <u>Carpet</u>: A manufactured article that is used in commercial or residential buildings affixed or placed on the floor or building walking surface as a decorative or functional building interior feature and that is primarily constructed of a top visible surface of synthetic face fibers or yarns or tufts attached to a backing system derived from synthetic or natural materials. Carpet includes, but is not limited to, a commercial or a residential broadloom carpet or modular carpet tiles. Carpet does not include a rug, pad, cushion, or underlayment used in conjunction with, or separately from, a carpet.
 (Note: CARE includes carpet with wool face fiber in this definition.)
- Carpet pads are manufactured by separate companies.
- 2. Funding Mechanism: Program funding is needed to cover collection and recycling activities, as well as education, administration, and other costs. There are two types of EPR funding models: cost internalization and eco-fees. Under cost internalization, manufacturers and importers internalize post-consumer management costs into the cost of doing business so that they are invisible to the consumer, even though the costs may be passed on to the consumer. Under an eco-fee, manufacturers are allowed to pass on a fee to the consumer (visibly or invisibly) for post-consumer product management costs. Other than the initial amount, the fee is rarely set in the legislation, but instead is proposed by the manufacturers' stewardship organization and approved by the state oversight agency.
 - California (AB2398): Eco-fee, starting at \$0.05, added to each square yard sold in CA, and noted as a separate line item on invoices. Must be sufficient to cover the cost of carrying out the plan, with surplus invested to help reduce costs.
 - Minnesota (HF 865, Sec 1): Eco-fee, with the proposed assessment to be reviewed by an
 independent auditor. Silent on visibility. Fee to be determined by sales into the state. Allows
 stewardship organization flexibility.
 - Illinois (SB3546): Eco-fee, starting at \$0.15, on PET, PTT, and blended carpet. Fee must be clearly visible on receipts. If, after 12 months, the fee generates more funds than required to operate the program, the fee must be lowered. If the stewardship organization does not have sufficient funds, they may submit a plan amendment to increase the fee, which must go through a public process.

Model: Eco-fee vs. cost internalization is a state-by-state decision. An increasing number of government agencies want producer funding to cover all program costs, including collection, processing, education, government oversight, and program administration, and general accounting standards should be applied to cap the stewardship organization's fund kept in reserve. The bill should also include penalties and incentives for design for the environment. <u>Under an eco-fee model</u>, fees should be higher for difficult-to-recycle materials, and should be designed to eventually sunset. The bill's preamble should explain how the funding mechanism works.

Comments:

- Many attendees preferred cost internalization to eco-fees, at least in theory. In some states, fees are
 viewed as taxes and more complicated to implement. Some retailers find the implementation of fees
 onerous, and internalization avoids this. Some also feel that fees are less effective at encouraging
 design for the environment, and that fees are not a typical way for societal costs to be covered. In
 practice, however, the eco-fee model helps ensure that collection programs have enough funding,
 and that recyclers are financially supported.
- Others argued that an eco-fee, when visible, provides a more direct price signal to the consumer about the true cost of the product. This is because the recycling fee is on the receipt, which shoppers read more readily than any point-of-purchase education. Still, others believe that cost internalization is best able to account for a product's true costs, and that eco-fees fail to educate the consumer about the full end-of-life management costs of their purchase.
- Cost internalization provides more flexibility for producers to respond to changing costs, although
 states can also impose a cap on the fee amount, and in some cases agencies could be given authority
 to increase the fee to respond to changing costs.
- Fees should not be seen as permanent, but as temporary "private development grants," with a goal of decreasing and eventually eliminating the fee over time.
- In California, there has been little objection from consumers to the \$0.05 per-square-yard fee.
- Retailers present at the meeting would prefer that any change in the fee require legislative action. Conversely, government attendees thought this was not possible in a timely manner.
- Discussion touched on the elasticity of the flooring market, with hard floor covering options available and competitive in price.
- **3. Incentive payments**: Promote recycling of specific target products by providing cash to collectors and processers. May include disincentives for manufacturers of products containing targeted materials.
 - **California** (AB2398): Incentives are funded by the industry in their plan. The plan must describe incentives or methods to increase recycling into secondary products.
 - **Minnesota** (HF 865, Sec 1): Does not specifically include an incentive; the method for reaching goals is up to manufacturers/the stewardship group.
 - Illinois (SB3546): Stewardship plan must describe incentive payments to processors of PET, PTT and blended carpet; incentives are to be funded by the plan; and incentives must be evaluated in the stewardship group's annual report.

Model: Any incentive payments should be designed by the manufacturer/stewardship organization rather than set in statute, and approved by the department as part of the overall plan. Differential incentives should be directed toward materials with low recycling rates. The plan should include a strong verification system to ensure incentives stay in-state. If an eco-fee model is chosen, incentives should be eligible for inclusion in the fee.

Comments:

- In California, CARE has been able to be flexible regarding incentive payments and introduced a
 growth incentive and a non-nylon incentive for processors in the Plan version 3.2 that was approved
 by CalRecycle. The growth incentive is designed to help prevent "stealing" pounds from other
 collectors.
- Under the Illinois bill, incentives subsidize recyclers and build onto their existing business model; it is not a full-cost EPR approach.
- Most government officials believed that incentives should be left to the private sector to manage, and that this was not government's role.
- **4. Performance Standards:** Encompass the collection and recycling goals to be reached by the program or the methodology by which responsible parties must set their own goals. Often numerical targets are set for annual collection or recycling volumes, weights, or rates, but may also include qualitative measures.
 - California (AB2398): Plan must include performance goals that increase diversion through reuse (numeric goal) and recycling (numeric goal), increase recyclability of carpet, and incentivize growth of secondary markets for products made from recycled carpet. Stewardship organization must demonstrate continuous, meaningful improvement in recycling and diversion.
 - Minnesota (HF 865, Sec 1) and Illinois (SB3546): Plan must include five-year (MN) or three-year (IL) performance goals, including percentage estimates for reuse and recycling, and specific escalating goals for the amount of discarded carpet to be collected, recycled, and reused each year.

Model: In either a cost internalization or eco-fee model, goals can be set in two ways:

- (1) Department sets statewide goal based on amount of carpet available for collection, then apportions the goal based on market share; **or**
- (2) Stewardship organizations set their own goals in their plans, but the Department has the authority to change, approve, or reject them. Producers must design their plan(s) to reach these goals, and must document their performance.

- Goals are just one part of a good plan; the goals themselves have little context until a stewardship plan has been in operation for several years.
- States must decide whether waste-to-energy and other Carpet as Alternative Fuel, or CAF, (e.g., cement kilns) should be included in the goals, and whether goals should include reuse.
- **5. Convenience Standards**: The minimum level of service to be provided to ensure that consumers all across the state have access to qualified collection and recycling services for the target products. Can be set in statute, regulation, or defined in manufacturers' plans.
 - **California** (AB2398): Plan must describe how consumers who pay the assessment will have reasonably easy access in each county to manage their post-consumer carpet.
 - **Minnesota** (HF 865, Sec 1): Plan must explain how the collection system will be convenient and adequate to serve the needs of small businesses and residents, with a phased roll-out from the metropolitan area to the rest of the state.
 - Illinois (SB3546): Plan must explain how the collection system will be convenient and adequate to serve the needs of small businesses and residents in both urban and rural areas on an ongoing basis. Must explain how the stewardship group will establish collection sites in 50 percent of counties by July 2017 and in 90 percent of counties by July 2018.

Model: Each manufacturer's collection program must be "convenient" to consumers statewide. Carpet drop-off locations must also be conveniently located for installers and contractors who handle this material, and must be available at no cost.

Comments:

- In Connecticut, no area is so remote that it should not be able to have convenient collection. New Jersey is similar.
- Some meeting attendees feel that while drop-off should be free to the consumer, it doesn't need to be free for installers and collectors if convenience is substantially improved.
- Some meeting attendees feel that, in urban areas, it is more important for installers and contractors (rather than consumers) to be responsible for taking material. For example, in New York City, only 50 percent of residents have cars.
- The cost of transportation to drop-off locations can vary widely across geographic areas.
- **6. Stewardship Organization**: Defines whether responsible parties must join a representative organization in complying with the law, or whether they may create and implement their own individual plan (i.e., "self-comply"). The bill must also set dates by which manufacturers must join a stewardship organization, and indicate whether multiple stewardship organizations are allowed.
 - **California** (AB2398): CARE is the sole stewardship organization until April 1, 2015. Thereafter, other stewardship organizations appointed by one or more manufacturers may submit plans.
 - **Minnesota** (HF 865, Sec 1): Multiple stewardship organizations allowed from program outset. Manufacturers may self-comply.
 - Illinois (SB3546): CARE is the sole carpet stewardship group until January 1, 2020. Thereafter, one or more producers may form a separate stewardship group, provided that their total market share is at least 20 percent. Producers may self-comply.

Model: The model should be flexible, allowing states the option to choose whether to allow multiple stewardship organizations or require just one.

- Some meeting attendees feel that allowing multiple stewardship organizations for carpet could create confusion and inefficiency.
- Meeting attendees representing the retail sector prefer that stewardship organizations be transparent and accept public input. (CARE includes mills, NGOs, and retailers, and has open annual meetings. Board meetings are not generally open, but guests have been allowed, except for executive session.)
- States need to determine if allowing multiple stewardship organizations means assigning different responsibilities, or if each would be required to accept all brands of carpet.
- Some attendees questioned whether a manufacturer stewardship organization would be able to carry out its responsibilities with a multi-stakeholder board due to potential conflicts, and whether an advisory group model would be a better format for soliciting input from other stakeholders.
- **7. State Procurement Requirements**: Spur the demand for recycled-content products by requiring state government procurement offices to buy recycled. The bill may define existing purchasing standards to follow (e.g., NSF/ANSI 140) and set other procurement goals.

- California (AB2398): CalRecycle must write a report on how to improve the NSF/ANSI 140 standard.
 Per the CA State Administrative Manual, all carpet purchased by California state agencies must meet the NSF/ANSI 140-2007 standard at its Platinum level.
- Minnesota (HF 865, Sec 1): No requirements in statute; already adopted NSF-140 administratively.
- Illinois (SB3546): Beginning in 2017, at least 35 percent of carpet purchased by state agencies shall have post-consumer recycled content from discarded carpet and comply with the NSF/ANSI 140-2009 Standard (Platinum Level or most current), increasing 10 percent per year until it reaches 75 percent. Prior to 2018, CARE will provide a report on other products made from recycled carpet.

Model: State-specific preference. If state perception is that changing purchasing standards would adversely impact fiscal note, might not want to pursue.

Comments:

- EPA's Comprehensive Procurement Guidelines only include PET, and need to be updated.
- Several government attendees prefer to work through their executive branch to establish procurement requirements, and already have requirements for carpet.
- The increasing goals included in Illinois SB3546 were inspired by the <u>carpet section</u> of New York's <u>comprehensive procurement policy</u>, which also includes take-back as an "encouraged" activity.
- States should consider how they audit the program to ensure procurement goals are met. This can be
 a challenge, as carpet is often purchased by contractors during new construction, meaning it does not
 need to meet procurement requirements.
- Include procurement officials in our carpet stewardship meetings.
- It is a challenge for states to ensure that they are meeting their own procurement goals.
- **8. Audit Requirements**: This element describes the program phases when an independent financial audit, or other type of independent audit, will be required.
 - Refer to the Elements of Carpet Legislation table for specific examples from California AB2398,
 Minnesota HF 865, and Illinois SB3546.

Model: If an eco-fee is included as the funding mechanism, there needs to be an independent analysis and verification that fees and costs are legitimate and reasonable for the fee chosen. A full independent audit should be conducted annually, starting in Year 2. The model must be explicit on timing (e.g., whether annual audits are required on the fiscal year, calendar year, etc.).

- Goals of an audit are to ensure that the stewardship organization meets legal requirements, that the proposed fee is the appropriate amount, and that funds are used appropriately.
- Independent audits can be used to evaluate the program holistically, in addition to its financial aspects.
- For the sake of transparency, audit results should be made public.
- **9. Anti-trust**: Language is included in this section to ensure that responsible parties (or stewardship organizations and their members) are immune from liability for any claim of antitrust law or unfair business practice related to the execution of their responsibilities under the law.
 - California (AB2398), Minnesota (HF 865, Sec 1), and Illinois (SB3546): All include state-specific language, the effect of which is to clearly state that manufacturers and stewardship organizations are immune from any liability relating to State anti-trust laws for actions carried

out in providing the services related to the EPR program. Specific language is included in the **Elements of Carpet Legislation** table.

Model: Use antitrust language that has passed in your state for other EPR laws.

Comments:

- In Connecticut and other states, the Attorney General's office writes this language for insertion into legislation.
- Anti-trust language is necessary for eco-fee laws, and may or may not be necessary for cost internalization laws. States will need to investigate whether to include it on a case-by-case basis.
- **10. Outreach and Education Requirements**: Defines the minimum requirements in the statute to ensure that consumers, responsible parties, retailers, and others are educated about the program, as well as any stipulations on how responsible parties must include outreach and education in their plans and annual reports. Also specifies who funds the education and outreach efforts and related evaluation requirements.
 - Refer to the Elements of Carpet Legislation table for specific examples from California AB2398,
 Minnesota HF 865, and Illinois SB3546.

Model: State agencies have the authority to approve or disapprove a plan, including covered outreach activities, along with a methodology for measuring success. At a minimum, a plan must:

- Include outreach to installers and other entities that actively participate in the collection program.
- Include education materials for retailers, provided by manufacturers.
- Include in its stewardship organization budget any outreach and education activities.

Comments:

- Several attendees felt that measuring the success of outreach and education is crucial.
- From a retailer perspective, the content of the message may be counter to what retailers want to present (e.g., telling customers not to buy a product if they don't need it), and is more likely to be seen by the customer only if they are looking for it (e.g., on the receipt).
- With carpet, there is an opportunity for both retailers and installers to educate the consumer about product end-of-life management.
- CARE acknowledged that they are still learning the best outreach methods.

Elements not discussed due to time constraints:

- **11. Disposal Ban**: Some EPR bills include a disposal ban to increase the flow of the target material to recyclers. Such provisions include the date by which the ban goes into effect.
 - California (AB2398) and Minnesota (HF 865, Sec 1): No disposal ban in statute.
 - Illinois (SB3546): Stewardship plans and annual reports must evaluate the feasibility and effectiveness of a ban on landfilling carpet, and provide an opinion on whether to recommend a landfill ban.

Model: State-by-state decision, but a disposal ban is not recommended at program outset (rather, after recycling infrastructure has been established).

- Stewardship Plan Contents: A key component to responsible parties meeting their legal requirements. Considered the program "roadmap" and includes how the responsible party will ensure consumer convenience, meet performance goals, provide effective education and outreach, and fund the program.
- Refer to the Elements of Carpet Legislation table for specific examples from California AB2398,
 Minnesota HF 865, and Illinois SB3546.

Model: Legislation should outline the basic elements required in any plan and let manufacturers fill in details. State agency should be allowed to require plan modifications if performance or convenience standards are not met.

- **12. Reporting Requirements**: The minimum information that responsible parties must include in reports to the state environmental agency, often including program performance data, a description of program activities and outcomes, an evaluation of the funding mechanism, an independent audit, and other program elements. Plans often include the amount of carpet collected, methods for meeting convenience standards, outreach activities, etc. Notable in each state are:
 - California (AB2398): Market development efforts for secondary products made from post-consumer recycled carpet; number of jobs created.
 - Minnesota (HF 865, Sec 1): Description of progress toward achieving carpet design changes.
 - Illinois (SB3546): Amount of carpet sold by polymer type; evaluation and recommendation regarding a landfill ban on carpet.

Model: In addition to core requirements from existing bills, include language requiring that any reporting of carpet sales, collection, recycling, and processing be separated by resin type. Reporting requirements should include total employment in the carpet recycling sector.

- 13. Penalties for Violation: This bill element provides a schedule of specific penalty amounts and infractions.
 - Refer to the Elements of Carpet Legislation table for specific examples from California AB2398,
 Minnesota HF 865, and Illinois SB3546.

Model: This is a state-specific issue.

- **14. Administrative Fees**: This section includes the amount of money to be paid to the state agency annually to administer the program; it may include a maximum amount.
 - Refer to the Elements of Carpet Legislation table for specific examples from California AB2398,
 Minnesota HF 865, and Illinois SB3546.

Model: Administrative fees should cover state agency costs. Specific fee amounts will be determined by individual states.

15. Implementation Schedule: Includes key milestones, such as when the act takes effect, when manufacturers must join a stewardship organization, when plans are due to the state and the amount of time before a plan must be approved or rejected, and when carpet from nonparticipating brands may no longer be sold.

• Refer to the **Elements of Carpet Legislation** table **for specific examples from California** AB2398, **Minnesota** HF 865, and **Illinois** SB3546.

Model: Each state will determine its own implementation schedule. Carpet cannot be sold by non-participating producers by certain date. Dates will reflect state specific timelines.